=> d his

(FILE 'HOME' ENTERED AT 13:33:24 ON 09 JAN 2002)

FILE 'USPATFULL' ENTERED AT 13:40:16 ON 09 JAN 2002

L1 5 S ((SHARK CARTILAGE) (2A) EXTRACT)/CLM

L2 1 S ((SHARK CARTILAGE) (2A) EXTRACT) AND (ANTI(W) HYPERTENS? OR AN

L3 2 S (SHARK CARTILAGE) AND (ANTI(W) HYPERTENS? OR ANTIHYPERTENSIVE .

L4 1 S L3 NOT L2

FILE 'CAPLUS' ENTERED AT 13:54:01 ON 09 JAN 2002

L5 1 S L2

FILE 'WPIDS' ENTERED AT 13:55:00 ON 09 JAN 2002

L6 1 S L2

L7 5 S (ANTI(2W)ANGIOGENES?) AND (ANTI(W)HYPERTENS? OR ANTIHYPERTENS

FILE 'CAPLUS' ENTERED AT 14:06:52 ON 09 JAN 2002

L8 2 S (ANTI(2W)ANGIOGENES?) AND (ANTI(W)HYPERTENS? OR ANTIHYPERTENS

FILE 'USPATFULL' ENTERED AT 14:07:50 ON 09 JAN 2002

L9 0 S ((ANTI(2W)ANGIOGENES?) AND (ANTI(W)HYPERTENS? OR ANTIHYPERTEN

L10 12 S ((ANTI(2W)ANGIOGENES?) AND (ANTI(W)HYPERTENS? OR ANTIHYPERTEN

Trying 3106016892...Open

Welcome to STN International! Enter x:x

LOGINID:ssspta1811mxb

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
NEWS
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
                 The CA Lexicon available in the CAPLUS and CA files
NEWS
         Feb 06
                Engineering Information Encompass files have new names
NEWS
         Feb 16
                 TOXLINE no longer being updated
                 Search Derwent WPINDEX by chemical structure
        Apr 23
NEWS
        Apr 23
NEWS
                 PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
      7
        May 07
NEWS
                 DGENE Reload
NEWS
      8
         Jun 20
                 Published patent applications (A1) are now in USPATFULL
NEWS
     9
         JUL 13
                 New SDI alert frequency now available in Derwent's
                 DWPI and DPCI
NEWS 10
        Aug 23
                 In-process records and more frequent updates now in
                 MEDLINE
NEWS 11
        Aug 23
                 PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
NEWS 12
        Aug 23
                 Adis Newsletters (ADISNEWS) now available on STN
NEWS 13
         Sep 17
                 IMSworld Pharmaceutical Company Directory name change
                 to PHARMASEARCH
NEWS 14
        Oct 09
                 Korean abstracts now included in Derwent World Patents
                 Index
NEWS 15 Oct 09
                Number of Derwent World Patents Index updates increased
NEWS 16 Oct 15 Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 17 Oct 22 Over 1 million reactions added to CASREACT
NEWS 18 Oct 22 DGENE GETSIM has been improved
NEWS 19 Oct 29 AAASD no longer available
NEWS 20 Nov 19 New Search Capabilities USPATFULL and USPAT2
NEWS 21 Nov 19
                TOXCENTER(SM) - new toxicology file now available on STN
NEWS 22 Nov 29
                COPPERLIT now available on STN
NEWS 23 Nov 29 DWPI revisions to NTIS and US Provisional Numbers
NEWS 24 Nov 30 Files VETU and VETB to have open access
NEWS 25 Dec 10 WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 26 Dec 10 DGENE BLAST Homology Search
NEWS 27
        Dec 17
                WELDASEARCH now available on STN
NEWS 28 Dec 17
                STANDARDS now available on STN
NEWS 29
        Dec 17
                New fields for DPCI
NEWS 30
        Dec 19
                CAS Roles modified
NEWS 31
        Dec 19
                1907-1946 data and page images added to CA and CAplus
NEWS EXPRESS August 15 CURRENT WINDOWS VERSION IS V6.0c,
              CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP),
             AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS INTER
             General Internet Information
NEWS LOGIN
              Welcome Banner and News Items
NEWS PHONE
             Direct Dial and Telecommunication Network Access to STN
NEWS WWW
             CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may

result in loss of user privileges and other penalties. FILE 'HOME' ENTERED AT 13:33:24 ON 09 JAN 2002 => file uspatfull COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 1.80 1.80 FILE 'USPATFULL' ENTERED AT 13:40:16 ON 09 JAN 2002 CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS) FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Jan 2002 (20020108/PD) FILE LAST UPDATED: 8 Jan 2002 (20020108/ED) HIGHEST GRANTED PATENT NUMBER: US6338160 HIGHEST APPLICATION PUBLICATION NUMBER: US2001047529 CA INDEXING IS CURRENT THROUGH 8 Jan 2002 (20020108/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Jan 2002 (20020108/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2001 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2001 >>> USPAT2 is now available. USPATFULL contains full text of the <<< >>> original, i.e., the earliest published granted patents or <<< >>> applications. USPAT2 contains full text of the latest US <<< >>> publications, starting in 2001, for the inventions covered in <<< >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> published document but also a list of any subsequent <<< >>> publications. The publication number, patent kind code, and <<< >>> publication date for all the US publications for an invention <<< >>> are displayed in the PI (Patent Information) field of USPATFULL <<< >>> records and may be searched in standard search fields, e.g., $/ ext{PN}$, <<<>>> /PK, etc. >>> USPATFULL and USPAT2 can be accessed and searched together <<< >>> through the new cluster USPATALL. Type FILE USPATALL to <<< >>> enter this cluster. <<< >>> <<< >>> Use USPATALL when searching terms such as patent assignees, <<< classifications, or claims, that may potentially change from <<< >>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

L1 ANSWER 1 OF 5 USPATFULL

2000:21612 USPATFULL ΑN

ΤI Methods of using extracts of shark cartilage

Dupont, Eric, St. Nicholas, Canada IN Brazeau, Paul, Montreal, Canada Juneau, Christina, Ste. Foy, Canada

Maes, Daniel H., Huntington, NY, United States Marenus, Kenneth, Dix Hills, NY, United States

Les Laboratoires Aeterna Inc., Quebec, Canada (non-U.S. corporation) PA

PΙ US 6028118 20000222

ΑI US 1996-693535 19960808 (8)

דת Utility

L1

Granted FS

EXNAM Primary Examiner: Eisenschenk, Frank C.; Assistant Examiner: Nelson,

LREP Matos, RickAkin, Gump, Strauss, Hauer & Feld, L.L.P.

CLMN Number of Claims: 12 ECL Exemplary Claim: 1

DRWN 31 Drawing Figure(s); 26 Drawing Page(s)

LN.CNT 2317

CLM What is claimed is:

. to transepidermal water loss, said method comprising the step of applying to the skin a therapeutically effective amount of a shark cartilage extract obtained by a process comprising the steps of: a) homogenizing shark cartilage in an

aqueous solution in conditions which are.

. soothing irritated mammalian skin, said method comprising the step of applying to the skin a therapeutically effective amount of a shark cartilage extract obtained by a

process comprising the steps of: a) homogenizing shark cartilage in an aqueous solution in conditions which are. inflammation in mammalian skin, said method comprising the step of

applying to the skin a therapeutically effective amount of a shark cartilage extract obtained by a process comprising the steps of: a) homogenizing shark cartilage in an

aqueous solution in conditions which are. . activity in mammalian skin, said method comprising the step of applying to the skin a therapeutically effective amount of a

shark cartilage extract obtained by a process comprising the steps of: a) homogenizing shark cartilage in an aqueous solution in conditions which are.

atrophy in mammalian skin, said method comprising the step of applying to the skin a therapeutically effective amount of a shark cartilage extract obtained by a

process comprising the steps of: a) homogenizing shark cartilage in an aqueous solution in conditions which are.

- acne in mammalian skin, said method comprising the step of applying to the skin a therapeutically effective amount of a shark cartilage extract obtained by a process comprising the steps of: a) homogenizing shark cartilage in an aqueous solution in conditions which are.
- . . psoriasis in mammalian skin, said method comprising the step of applying to the skin a therapeutically effective amount of a shark cartilage extract obtained by a process comprising the steps of: a) homogenizing shark cartilage in an aqueous solution in conditions which are. .

```
aging in mammalian skin, said method comprising the step of applying
       to the skin a therapeutically effective amount of a shark
       cartilage extract obtained by a process comprising the
       steps of: a) homogenizing shark cartilage in an aqueous solution in
       conditions which are.
          eczema in mammalian skin, said method comprising the step of applying
       to the skin a therapeutically effective amount of a shark
       cartilage extract obtained by a process comprising the
       steps of: a) homogenizing shark cartilage in an aqueous solution in
       conditions which are.
     ANSWER 2 OF 5 USPATFULL
L1
AN
       2000:18419 USPATFULL
ΤI
       Extracts of shark cartilage having anti-collagenolytic,
       anti-inflammatory, anti-angiogenic and anti-tumoral activities; process
       of making, methods of using and compositions thereof
IN
       Dupont, Eric, St. Nicolas, Canada
       Brazeau, Paul, Montreal, Canada
       Juneau, Christina, Ste. Foy, Canada
       Maes, Daniel H., Huntington, NY, United States
       Marenus, Kenneth, Dix Hills, NY, United States
PA
       Les Laboratoires Aeterna Inc., Canada (non-U.S. corporation)
       US 6025334
PI
                               20000215
ΑI
       US 1995-550003
                               19951030 (8)
RLI
       Continuation-in-part of Ser. No. US 1995-384555, filed on 3 Feb 1995,
       now patented, Pat. No. US 5618925, issued on 8 Apr 1997 which is a
       continuation-in-part of Ser. No. US 1994-234019, filed on 28 Apr 1994,
       now abandoned
       Utility
DT
FS
       Granted
EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Mohamed, Abdel
LREP
      Matos, RickAkin, Gump, Strauss, Hauer & Feld, L.L.P.
CLMN
      Number of Claims: 28
ECL
       Exemplary Claim: 1
DRWN
       31 Drawing Figure(s); 17 Drawing Page(s)
LN.CNT 1732
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CLM
      What is claimed is:
          of tumor proliferation, angiogenesis, inflammation and
       collagenolysis, the topical formulation comprising a pharmaceutical
       composition comprising an effective amount of a shark
       cartilage extract and an antioxidant, said
       shark cartilage extract being prepared
       according to a process comprising the steps of: a) homogenizing the
       cartilage in an aqueous solution in conditions.
       . the method comprising the step of administering to a patient in need
      of such treatment an effective amount of a shark
      cartilage extract, said shark
       cartilage extract being prepared according to a
      process which comprises the following steps: a) homogenizing the
       cartilage in an aqueous solution in. .
    ANSWER 3 OF 5 USPATFULL
L1
AN
       1999:146538 USPATFULL
       Extracts of shark cartilage having an anti-angiogenic activity and an
ΤI
       effect on tumor regression: process of making thereof
IN
       Dupont, Eric, St. Nicolas, Canada
       Brazeau, Paul, Montreal, Canada
       Juneau, Christian, Ste. Foy, Canada
PA
      Les Laboratories Aeterna Inc., Quebec, Canada (non-U.S. corporation)
ΡI
      US 5985839
                               19991116
```

19961008 (8) ΑI US 1996-727300 Continuation of Ser. No. US 1995-384555, filed on 3 Feb 1995, now RLI patented, Pat. No. US 5618925 which is a continuation-in-part of Ser. No. US 1994-234019, filed on 28 Apr 1994, now abandoned Utility DTFS Granted EXNAM Primary Examiner: Tsang, Cecilia; Assistant Examiner: Mohamed, Abdel A. Matos, RickAkin, Gump, Strauss, Hauer & Feld, L.L.P. LREP Number of Claims: 57 CLMN ECL Exemplary Claim: 1 DRWN 7 Drawing Figure(s); 14 Drawing Page(s) LN.CNT 1282 CAS INDEXING IS AVAILABLE FOR THIS PATENT. What is claimed is: CLM 51. A shark cartilage extract comprising at least one biologically active component having a molecular weight of less than about 500 KDa; an anti-angiogenic activity;. 52. A shark cartilage extract according to claim 51, wherein said at least one biologically active component has a molecular weight in the range of. 53. A shark cartilage extract according to claim 51, wherein said at least one biologically active component comprises at least one biologically active component having. 54. A shark cartilage extract according to claim 51, wherein said at least at one biologically active component comprises at least one biologically active component. . 55. A pharmaceutical composition comprising a shark cartilage extract as defined in claim 51. said method comprising the step of administering to a patient in need of such treatment an effective amount of a shark cartilage extract as defined in claim 51 for a period of time to sufficient treat said diseases or disorders. ANSWER 4 OF 5 USPATFULL L1AN97:29579 USPATFULL ΤI Extracts of shark cartilage having an anti-angiogenic activity and an effect on tumor regression; process of making thereof Dupont, Eric, St. Nicolas, Canada IN Brazeau, Paul, Montreal, Canada Juneau, Christi, Ste. Foy, Canada PA Les Laboratories Aeterna Inc., Quebec, Canada (non-U.S. corporation) US 5618925 ΡI 19970408 ΑI US 1995-384555 19950203 (8) RLI Continuation-in-part of Ser. No. US 1994-234019, filed on 28 Apr 1994 DT Utility FS Granted Primary Examiner: Weimar, Elizabeth C.; Assistant Examiner: Mohamed, EXNAM Abdel A. LREP Cushman Darby & Cushman IP Group of Pillsbury Madison & Sutro LLP Number of Claims: 28 CLMN Exemplary Claim: 1 ECL DRWN 16 Drawing Figure(s); 14 Drawing Page(s) LN.CNT 1153 CAS INDEXING IS AVAILABLE FOR THIS PATENT. CLM What is claimed is: 1. A process for obtaining a solid extract of shark cartilage having anti-angiogenic, direct anti-tumoral and anti-tumor proliferating activities, which comprises the following steps: a) homogenizing pieces of solid shark cartilage. 7. A process for obtaining a liquid extract of shark

pieces of solid shark cartilage in a non-denaturing aqueous solution until said pieces. 26. A process for obtaining a liquid extract of shark cartilage having anti-angiogenic, direct anti-tumoral and anti-tumor proliferating activities which comprises the following steps, all performed at about 4.degree. C.: a). ANSWER 5 OF 5 USPATFULL 84:53979 USPATFULL Anti-inflammatory composition Schinitsky, Michael, Madison, WI, United States Faxon Pharmaceuticals, Inc., Madison, WI, United States (U.S. corporation) US 4473551 19840925 US 1983-502716 19830609 (6) Continuation-in-part of Ser. No. US 1982-410447, filed on 23 Aug 1982, now abandoned Utility Granted EXNAM Primary Examiner: Rosen, Sam Barnes & Thornburg Number of Claims: 21 Exemplary Claim: 1 No Drawings LN.CNT 344 CAS INDEXING IS AVAILABLE FOR THIS PATENT. What is claimed is: 10 wherein said cartilage is administered in the form of the greater than 100,000 molecular weight fraction of an aqueous extract of whole shark cartilage. => d pn 1-5ANSWER 1 OF 5 USPATFULL 20000222 US 6028118 ANSWER 2 OF 5 USPATFULL US 6025334 20000215 ANSWER 3 OF 5 USPATFULL US 5985839 19991116 ANSWER 4 OF 5 USPATFULL 19970408 US 5618925 ANSWER 5 OF 5 USPATFULL US 4473551 19840925 => d ai 1-5ANSWER 1 OF 5 USPATFULL US 1996-693535 19960808 (8) ANSWER 2 OF 5 USPATFULL US 1995-550003 19951030 (8) ANSWER 3 OF 5 USPATFULL

19961008 (8)

cartilage which comprises the following steps: a) homogenizing

L1AN

ΤI

IN

PA

PΙ

ΑI

DT

FS

LREP

CLMN

DRWN

ECL

CLM

L1

PΙ

T.1

PΤ

L1

PΙ

L1

PΙ

T.1 PΤ

L1

ΑI

L1ΑI

T.1

AΙ

US 1996-727300

RLI

```
ANSWER 4 OF 5 USPATFULL
L1
                               19950203 (8)
      US 1995-384555
ΑI
     ANSWER 5 OF 5 USPATFULL
L1
ΑI
      US 1983-502716
                               19830609 (6)
=> s ((shark cartilage) (2a) extract) and (anti(w)hypertens? or antihypertensive or
((Calcium or Ca) (2w) blocker#) or verapamil or nifedipin or diltiasem)
          1189 SHARK
           351 SHARKS
          1407 SHARK
                 (SHARK OR SHARKS)
          6873 CARTILAGE
           447 CARTILAGES
          7064 CARTILAGE
                 (CARTILAGE OR CARTILAGES)
            88 SHARK CARTILAGE
                 (SHARK(W) CARTILAGE)
        143384 EXTRACT
         95409 EXTRACTS
        191564 EXTRACT
                 (EXTRACT OR EXTRACTS)
             9 (SHARK CARTILAGE) (2A) EXTRACT
        220674 ANTI
            19 ANTIS
        220683 ANTI
                 (ANTI OR ANTIS)
         16378 HYPERTENS?
          2456 ANTI (W) HYPERTENS?
          5646 ANTIHYPERTENSIVE
          1789 ANTIHYPERTENSIVES
          6689 ANTIHYPERTENSIVE
                 (ANTIHYPERTENSIVE OR ANTIHYPERTENSIVES)
        215896 CALCIUM
            54 CALCIUMS
        215898 CALCIUM
                 (CALCIUM OR CALCIUMS)
        111832 CA
        12083 CAS
        121951 CA
                 (CA OR CAS)
         10010 BLOCKER#
          2056 (CALCIUM OR CA) (2W) BLOCKER#
          1928 VERAPAMIL
             3 VERAPAMILS
          1928 VERAPAMIL
                 (VERAPAMIL OR VERAPAMILS)
            82 NIFEDIPIN
             2 DILTIASEM
L2
             1 ((SHARK CARTILAGE) (2A) EXTRACT) AND (ANTI(W) HYPERTENS? OR ANTIH
               YPERTENSIVE OR ((CALCIUM OR CA) (2W) BLOCKER#) OR VERAPAMIL OR
               NIFEDIPIN OR DILTIASEM)
=> d kwic
    ANSWER 1 OF 1 USPATFULL
       . . . compounds that interfere with DNA replication, mitosis and
       chromosomal segregation. Such chemotherapeutic compounds include
       adriamycin, also known as doxorubicin, etoposide, verapamil,
```

podophyllotoxin, and the like. Widely used in a clinical setting for the

treatment of neoplasms, these compounds are administered through. CAI is a small molecular weight synthetic inhibitor of angiogenesis that DETD acts as a calcium channel blocker that prevents actin reorganization, endothelial cell migration and spreading on collagen IV. CAI inhibits neovascularization at physiological attainable concentrations and.

DETD . . acids and paclitaxel (U.S. Pat. No. 5,716,981; incorporated herein by reference); AGM-1470 (Ingber el al., 1990; incorporated herein by reference); shark cartilage extract (U.S. Pat. No. 5,618,925; incorporated herein by reference); anionic polyamide or polyurea oligomers (U.S. Pat. No. 5,593,664; incorporated herein by.

=> d hit

1.2 ANSWER 1 OF 1 USPATFULL

Further useful agents include compounds that interfere with DNA DETD replication, mitosis and chromosomal segregation. Such chemotherapeutic compounds include adriamycin, also known as doxorubicin, etoposide, verapamil, podophyllotoxin, and the like. Widely used in a clinical setting for the treatment of neoplasms, these compounds are administered through bolus injections intravenously at doses ranging from 25-75 mg/m.sup.2 at 21 day intervals for adriamycin, to 35-50mg/m.sup.2 for etoposide intravenously or double the intravenous dose orally.

DETD CAI is a small molecular weight synthetic inhibitor of angiogenesis that acts as a calcium channel blocker that prevents actin reorganization, endothelial cell migration and spreading on collagen IV. CAI inhibits neovascularization at physiological attainable concentrations and is well tolerated orally by cancer patients. Clinical trials with CAI have yielded disease stabilization in 49% of cancer patients having progressive disease before treatment.

Further specific angiogenesis inhibitors, including, but not limited to, DETD Anti-Invasive Factor, retinoic acids and paclitaxel (U.S. Pat. No. 5,716,981; incorporated herein by reference); AGM-1470 (Ingber el al., 1990; incorporated herein by reference); shark cartilage extract (U.S. Pat. No. 5,618,925; incorporated herein by reference); anionic polyamide or polyurea oligomers (U.S. Pat. No. 5,593,664; incorporated herein by reference); oxindole derivatives (U.S. Pat. No. 5,576,330; incorporated herein by reference); estradiol derivatives (U.S. Pat. No. 5,504,074; incorporated herein by reference); and thiazolopyrimidine derivatives (U.S. Pat. No. 5,599,813; incorporated herein by reference) are also contemplated for use as anti-angiogenic compositions for the combined uses of the present invention.

=> d

T.2 ANSWER 1 OF 1 USPATFULL

AN 2001:196603 USPATFULL

Cancer treatment methods using therapeutic conjugates that bind to TI aminophospholipids

ΙN Thorpe, Philip E., Dallas, TX, United States Ran, Sophia, Dallas, TX, United States

PA Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)

PΙ US 6312694 В1 20011106 US 1999-351457 ΑI 19990712 (9) 19980713 (60) 19981202 (60) PRAI US 1998-92589

US 1998-110600 19981202 (60)

```
DT
       Utility
       GRANTED
FS
LN.CNT 8243
       INCLM: 424/178.100
INCL
       INCLS: 424/133.100; 424/134.100; 424/135.100; 424/136.100; 424/137.100;
              424/141.100; 424/142.100; 424/143.100; 424/181.100; 424/193.100;
              514/012.000; 530/387.100; 530/388.100
NCL
       NCLM:
              424/178.100
       NCLS:
              424/133.100; 424/134.100; 424/135.100; 424/136.100; 424/137.100;
              424/141.100; 424/142.100; 424/143.100; 424/181.100; 424/193.100;
              514/012.000; 530/387.100; 530/388.100
IC
       ICM: A61K039-395
       ICS: C12P021-08; C07K016-00
EXF
       514/12; 424/133.1; 424/135.1; 424/136.1; 424/137.1; 424/141.1;
       424/142.1; 424/143.1; 424/178.1; 424/181.1; 424/193.1; 530/387.1;
       530/388.1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> s (shark cartilage) and (anti(w) hypertens? or antihypertensive or ((Calcium or
Ca) (2w) blocker#) or verapamil or nifedipin or diltiasem)
          1189 SHARK
           351 SHARKS
          1407 SHARK
                 (SHARK OR SHARKS)
          6873 CARTILAGE
           447 CARTILAGES
          7064 CARTILAGE
                  (CARTILAGE OR CARTILAGES)
            88 SHARK CARTILAGE
                 (SHARK(W)CARTILAGE)
        220674 ANTI
            19 ANTIS
        220683 ANTI
                  (ANTI OR ANTIS)
         16378 HYPERTENS?
          2456 ANTI (W) HYPERTENS?
          5646 ANTIHYPERTENSIVE
          1789 ANTIHYPERTENSIVES
          6689 ANTIHYPERTENSIVE
                 (ANTIHYPERTENSIVE OR ANTIHYPERTENSIVES)
        215896 CALCIUM
            54 CALCIUMS
        215898 CALCIUM
                  (CALCIUM OR CALCIUMS)
        111832 CA
         12083 CAS
        121951 CA
                 (CA OR CAS)
         10010 BLOCKER#
          2056 (CALCIUM OR CA) (2W) BLOCKER#
          1928 VERAPAMIL
             3 VERAPAMILS
          1928 VERAPAMIL
                  (VERAPAMIL OR VERAPAMILS)
            82 NIFEDIPIN
             2 DILTIASEM
L3
             2 (SHARK CARTILAGE) AND (ANTI(W) HYPERTENS? OR ANTIHYPERTENSIVE OR
               ((CALCIUM OR CA) (2W) BLOCKER#) OR VERAPAMIL OR NIFEDIPIN OR
               DILTIASEM)
```

```
=> s 13 not 12
            1 L3 NOT L2
L4
=> d bib, hit
     ANSWER 1 OF 1 USPATFULL
T.4
AN
       2001:182585 USPATFULL
ΤI
       Compositions and methods for prevention and treatment of chronic
       diseases and disorders including the complications of diabetes mellitus
       Kosbab, John V., Dillon, CO, United States
IN
       US 2001031744
                               20011018
PI
                          A1
       US 2001-827251
ΑI
                          A1
                               20010405 (9)
       Continuation of Ser. No. US 1998-18273, filed on 4 Feb 1998, ABANDONED
RLI
       US 1997-37084
                          19970204 (60)
PRAI
       US 1997-43262
                           19970417 (60)
DT
       Utility
FS
       APPLICATION
LREP
       GREENLEE WINNER and SULLIVAN, P.C., Suite 201, 5370 Manhattan Circle,
       Boulder, CO, 80303
       Number of Claims: 32
CLMN
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 2318
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       [0024] (iv) A neovascular regulator selected from genistein and/or
       daidzein; soy isolate comprising genistein and/or daidzein; cartilage or
       chondroitin sulphate; chondroitin sulphate is a preferred neovascular
       regulator also associated with collagen synthesis; shark
       cartilage is a preferred cartilage preparation.
SUMM
       [0211] A source of cartilage or a cartilage preparation, e.g.,
       shark cartilage.
SUMM
       [0235] (iii) A neovascular regulator selected from genistein and/or
       diadzein; soy isolate comprising genistein and/or diadzein;
       shark cartilage or chondroitin sulphate.
SUMM
       [0245] Glucosamine sulphate; and optionally a cartilage preparation,
       e.g., shark cartilage
SUMM
       [0372] One or more of the functionalities listed in Table 1 can be
       provided in the compositions of this invention by art-known drug
       equivalents. For example, art-known antidiabetic agents,
       antihypertensives, angiotensin converting enzyme inhibitors,
       vasodilators, anticholesteremics, antihyperlipoproteinemics,
       angiogenesis regulators, and enzyme co-factors can be combined in
       effective amounts for ameliorating symptoms and conditions associated
       with microangiopathy, particularly retinopathy and nephropathy, with
       formulas of this invention.
SUMM
       [0406] Green tea extract, tea polyphenols, contains a small amount of
       2-3% of proanthocyanidin. It nevertheless is a potent antioxidant for
       lipid peroxides, superoxides and hydroxyl radicals. It contains
       relatively high concentrations of (-) epigallocatechin gallate (EGCg), a
       condensed tannin polyphenol. In addition to antioxidant function, tea
      polyphenols also have anti-platelet, anti-cholesterolemia, anti
       -hypertension, anti-hyperglycemic and anti-mutagenic
       activities. Tea polyphenols also assist theoflavin digallate in acting
      as an angiotensin converting enzyme inhibitor, but do not have the
      undesired pro-oxidant properties of captopril.
SUMM
       [0411] Cartilage, an avascular tissue, is a source of angiogenesis
```

ľ

inhibitor(s). Shark and bovine cartilage, among others, are sources of angiogenesis inhibitor and may provide collagenase inhibition as well. Chondroitin sulphate, a mucoploysaccharide found in most mammalian cartilaginous tissues and shark cartilage, is believed by many to be the most active angiogenesis regulating component of Shark Cartilage. The restoration of diabetic depleted chondroitin sulphates may also affect collagen stabilization which would help to normalize the collagen matrix of vascular tissue and therefore create a more stable vascular structure. Chondroitin sulphate can be provided in a number of forms with different counterions, e.g., sodium, potassium, etc. Sodium chondroitin sulphate is the form preferred for use in compositions of this invention.

SUMM [0414] Heparin sulphate levels are increased in diabetics while levels of chondroitin sulphates are decreased. This suggests an imbalance in chondroitin sulphate and in angiogenic regulation. Gymnema Sylvestre which normalizes heparin levels is provided in the compositions of this invention, at least in part, to affect heparin levels which in turn may affect angiogenic regulation due to shark cartilage and protamine sulfate which both bind to heparin. The insulin/glucose stabilization effects of Gymnema sylvestre would reduce the oxidative stress that contributes to the neovascularization factors described above.

SUMM [0457] Gymnemic acid, the active ingredient in Gymnema sylvestre, suppresses sensitivity to sugar and its absorption, thereby reducing blood glucose levels. It also restores the levels of three chondroitin sulfates which may assist in collagen repair and/or aid in angiogenesis regulation. Heparin sulphate levels are increased in diabetics while three chondroitin sulfates are decreased. Gymnema sylvestre which normalizes heparin levels could play a supporting role in the angiogenic regulation of other ingredients in this formulation, namely shark cartilage and protamine sulfate. Both are angiogenic regulators which bind to heparin. The restoration of depleted chondroitin sulfates probably plays a role in collagen stabilization which would help to normalize the collagen matrix and therefore create a more stable structure upon which angiogenesis regulation could more easily exist. The insulin/glucose stabilization effects of Gymnema sylvestre would reduce the oxidative stress that contributes to the neovascularization factors described above.

DETD [0496] Shark cartilage powder (100%, 200 mesh) was obtained from Global Trading (USA) Inc. (Union, N.J.).

DETD [0503] Those of ordinary skill in the art of formulation of nutrients and therapeutic compositions will appreciate that components functionally equivalent to those specifically disclosed herein, as well as alternative forms and sources in addition to those specifically disclosed herein for individual composition ingredients are available. This invention is intended to encompass all such functional equivalents and alternatives that are readily known to the art.

TABLE 1

Summary of Functions of Components of Compositions of this invention for Microangiopathy and Macroangiopathy

Primary formulas comprise components which:

- 1. Function as antioxidant to control oxidative stress;
- 2. Function as neovascular regulators controlling angiogenesis to promote vascular healing and integrity;
- 3. Stabilize glucose and amylase factors, for example, to increase

glucose tolerance in diabetes; and

4. Supplement dietary deficiencies and loss through spillage, particularly as associated with diabetes.

Compositions of this invention can further comprise components which:

- 5. Stabilize insulin supply and decrease sensitivity to glucose;
- Stabilize protein factors, control proteinuria, glycosylation and albumin;
- 7. Control anti-sclerotic factors, functioning as/to:
 - A. Anti-platelet or anti-thrombic agents
 - B. Homocysteine inhibitors
 - C. Reduce atherosclerotic lesions
 - D. Reduce LDL and VLDL
 - E. Improve HDL/LDL ratio
 - F. Inhibit lipoprotein (a) production
 - G. Inhibit cholesterol absorption in bowel
 - H. Enhance cholesterol excretion
 - I. Triglycerides inhibitors
 - J. Fibrogen inhibitors
 - K. Nitric Oxide inhibitors (Optional)
 - L. Ketosis regulators
- 8. Reduce immune phagocytic response to:
 - A. Leukotrienes, neutrophils, etc.
 - B. Immunoglobulin (a)
- 9. Reduce and stabilize anti-hypertensives as:
 - A. Angiotensin converting enzyme inhibitors & vasodilators
 - B. Prostacyclin inhibitors
 - C. Aldose Reductase inhibitors
 - D. Blood pressure inhibitor/regulator (systolic only)
 - E. Agents to reduce blood pressure during bowel contractions
 - F. Anti-edema agent
 - G. Histamine suppressors
- 10. Enhance cellular or metabolic function, for example for:
 - A. Glutathione restoration
 - B. ATP/NAD restoration
- 11. Promote vascular healing and integrity by:
 - A. Restoring the collagen matrix
 - B. Histamine suppression (Optional)
- 12. Promote better nutrient digestion and absorption
- 13. Improve pH factor by controlling digistens and systemic hyperacidity
- 14. Participate in collagen synthesis
- 15. Calcium regulator
- 16. Control myocardial infarction and damage
- 17. Increase cardiovascular exercise ability and tolerance
- 18. Increase other antioxidants, including Vitamin E, reduced glutathione, uric acid, superoxide dismutase (SOD), catalyze, or glutathione peroxidase
- 19. Inhibit breakdown of myocardial cell membrane
- 20. Provide immune differentiation
- 21. Restore Vitamin E levels by intestinal absorption of omega-3-fatty acids
- 22. Improves cell transport and mitochondrial function
- 23. Improves sleep for better disease resistance and recovery
- 24. Amino acid believed to inhibit or ameliorate diabetes pathogenesis
- 25. Amino acid believed to inhibit or ameliorate cardiovascular pathogenesis
- 26. Amino acid believed to contribute to wound healing or prevention
- 27. Amino acid believed to inhibit or ameliorate neuropathic pathogenesis
- 28. Amino acid believed to inhibit or ameliorate dental and periodontal pathogenesis
- 29. Promoter of DNA polymerase for wound healing
- 30. Provides protein sources for wound healing
- 31. Contributes to improved bone density

32. Promotes anti-caries and anti-gingivitis environment 33. Accelerates wound healing DETD [0506] TABLE 4

Exemplary Diabetic Compliations Fo	AVERAGE	AVERAGE
	ADULT DOSE	ADULT DOSE
	PER DAY -	PER DAY -
	mg/day	mg/day
2010 0117117D	FORMULATION	FORMULATION
COMPONENT	A	В
Dilbanna Entract 250 ODG	375	375
Bilberry Extract, 25% OPC	500	500
Calcium (Krebs)	(110 active)	(110 active)
Chondroitin Sulfate	750	750
Chromium Picolinate	200 .mu.g	200 .mu.g
Chromitum Ficolinate	_	ve) (24.60 .mu.g active)
CoQ10	20 .mu.g acti	20 .mu.g active)
Fenugreek Seed Powder	150	150
Flax Seed Powder	500	500
Folic Acid	800 .mu.g	450 .mu.g
Linoleic Acid	25	25
Ginko Biloba 24%	25	25
Gymnema Sylvestre	250	250
Taurine or Homotaurine	100	100
Grape Seed extract, 95-100%	100	100
OPC	100	100
Acetyl-l-carnitine	50	50
Lutein	120	120
Magnesium (Krebs)	300	300
	(48 active)	(48 active)
N-Acetyl-1-cysteine	200	200
Pine Bark Extract (greater than	20	20
85% OPC)		
Phytosterol Complex (Cholestatin	200	200
III)		
Potassium Citrate	90	90
	(32.4)	(32.4)
Protamine Sulfate	50	50
Shark Cartilage 100%	1,000	1,000
Soy Isolate	1,000	1,000
	(920 active)	(920 active)
Green Tea Polyphenols	100	100
Lipoic Acid	20	20
Vitamin A	5,000 iu	5,000 iu
(Acetate Formula A)		
(Palmitate Formula B)		
Vitamin B-2 (Riboflavin)	3	50
Vitamin B-6 (Pyridoxine hydro-	4.88 active	213.4
chloride)		(175 active)
Vitamin B-12 (Cyanocobalamin	100 .mu.g active	100 .mu.g active
18)	1 000	1 000
Vitamin C (Ascorbic acid)	1,000	1,000
Vitamin E, d-alpha tocopheryl	714	714
acetate	(500 iu active)	(500 iu active)
Zinc (Krebs)	30	30
	(9 active)	(9 active)

=> file caplus COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 42.22 44.02

FILE 'CAPLUS' ENTERED AT 13:54:01 ON 09 JAN 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1907 - 9 Jan 2002 VOL 136 ISS 2 FILE LAST UPDATED: 7 Jan 2002 (20020107/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

CAplus now provides online access to patents and literature covered in CA from 1907 to the present. Bibliographic information and abstracts were added in 2001 for over 3.8 million records from 1907-1966.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The CA Lexicon is now available in the Controlled Term (/CT) field. Enter HELP LEXICON for full details.

Attention, the CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

=> d his

(FILE 'HOME' ENTERED AT 13:33:24 ON 09 JAN 2002)

FILE 'USPATFULL' ENTERED AT 13:40:16 ON 09 JAN 2002

- L1 5 S ((SHARK CARTILAGE) (2A) EXTRACT)/CLM
- L2 1 S ((SHARK CARTILAGE) (2A) EXTRACT) AND (ANTI(W) HYPERTENS? OR AN
- L3 2 S (SHARK CARTILAGE) AND (ANTI(W) HYPERTENS? OR ANTIHYPERTENSIVE
- L4 1 S L3 NOT L2

FILE 'CAPLUS' ENTERED AT 13:54:01 ON 09 JAN 2002

=> s 12

3041 SHARK

832 SHARKS

3338 SHARK

(SHARK OR SHARKS)

```
824 CARTILAGES
         17628 CARTILAGE
                 (CARTILAGE OR CARTILAGES)
           170 SHARK CARTILAGE
                 (SHARK (W) CARTILAGE)
         21958 EXTRACT
         28628 EXTRACTS
         49577 EXTRACT
                 (EXTRACT OR EXTRACTS)
        252469 EXT
        188279 EXTS
        397312 EXT
                  (EXT OR EXTS)
        410797 EXTRACT
                 (EXTRACT OR EXT)
            20 (SHARK CARTILAGE) (2A) EXTRACT
        261321 ANTI
             7 ANTIS
        261327 ANTI
                  (ANTI OR ANTIS)
         62745 HYPERTENS?
           396 ANTI (W) HYPERTENS?
         21019 ANTIHYPERTENSIVE
         20808 ANTIHYPERTENSIVES
         26999 ANTIHYPERTENSIVE
                 (ANTIHYPERTENSIVE OR ANTIHYPERTENSIVES)
        553920 CALCIUM
            31 CALCIUMS
        553925 CALCIUM
                  (CALCIUM OR CALCIUMS)
        690616 CA
          9703 CAS
        698830 CA
                 (CA OR CAS)
         45545 BLOCKER#
          8780 (CALCIUM OR CA) (2W) BLOCKER#
         14525 VERAPAMIL
             2 VERAPAMILS
         14526 VERAPAMIL
                 (VERAPAMIL OR VERAPAMILS)
            31 NIFEDIPIN
             1 DILTIASEM
L5
             1 ((SHARK CARTILAGE) (2A) EXTRACT) AND (ANTI(W) HYPERTENS? OR ANTIH
               YPERTENSIVE OR ((CALCIUM OR CA) (2W) BLOCKER#) OR VERAPAMIL OR
               NIFEDIPIN OR DILTIASEM)
=> d bib, kwic
L5
     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN
     1999:64822 CAPLUS
DN
     130:90515
ΤI
     A preparation derived from shark cartilage for treatment of diseases
     related to excessive parathyroid hypertensive factor or excessive
     intracellular calcium
IN
     Pang, Peter K. T.; Shan, Jacqueline J.; Chiu, Kam W.
PA
     CV Technologies Inc., Can.
     PCT Int. Appl., 30 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
```

17498 CARTILAGE

```
APPLICATION NO. DATE
                      KIND DATE
     PATENT NO.
     ______
                                            _____
                                           WO 1998-US13591 19980709
                      A1 19990121
PΙ
     WO 9902548
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                           19990208
                                           AU 1998-83790
     AU 9883790
                       A1
                                                              19980709
                       A1
                            20000628
                                            EP 1998-934212
                                                              19980709
         R: AT, CH, DE, FR, GB, LI, FI
                      Т2
                                            JP 2000-502067
     JP 2001509513
                           20010724
                                                             19980709
PRAI US 1997-52233
                       Ρ
                             19970711
     WO 1998-US13591 W
                            19980709
RE.CNT 6
(1) Dupont; US 5618925 A 1997 CAPLUS
(2) Furuhashi; US 3371012 A 1968
(3) Lane; US 5075112 A 1991
(4) Pang; US 5192664 A 1993 CAPLUS
(6) Schinitsky; US 4473551 A 1984 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB
     Shark cartilage ext. has been shown to be an
     antagonist of parathyroid hypertensive factor (PHF). In view of this,
     shark cartilage ext. can be used to treat
     conditions related to excessive PHF activity. Such diseases include
     hypertension and some other diseases related to intracellular calcium
     elevation. Methods for producing the shark cartilage
     ext. and methods for administering the ext. are disclosed.
     shark cartilage ext parathyroid hypertensive
ST
     factor inhibition hypotensive; calcium disease shark
     cartilage ext parathyroid hypertensive factor inhibition
IT
     Mucopolysaccharides, biological studies
     Proteins (general), biological studies
     RL: BOC (Biological occurrence); BIOL (Biological study); OCCU
     (Occurrence)
        (in shark cartilage ext.; shark
        cartilage ext. for treatment of diseases related to
        excessive parathyroid hypertensive factor or excessive intracellular
        calcium)
ΙT
     Vascular smooth muscle
        (proliferation inhibition; shark cartilage
        ext. for treatment of diseases related to excessive parathyroid
        hypertensive factor or excessive intracellular calcium)
IT
     Antihypertensives
     Cartilage
     Drug delivery systems
        (shark cartilage ext. for treatment of
        diseases related to excessive parathyroid hypertensive factor or
        excessive intracellular calcium)
IT
     Antiproliferative agents
        (vascular smooth muscle; shark cartilage
        ext. for treatment of diseases related to excessive parathyroid
        hypertensive factor or excessive intracellular calcium)
IT
     25322-46-7, Chondroitin sulfate C
     RL: BOC (Biological occurrence); BIOL (Biological study); OCCU
     (Occurrence)
        (in shark cartilage ext.; shark
```

cartilage ext. for treatment of diseases related to
excessive parathyroid hypertensive factor or excessive intracellular
calcium)

IT 7440-70-2, Calcium, biological studies 130037-95-5, Parathyroid hypertensive factor

RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (shark cartilage ext. for treatment of diseases related to excessive parathyroid hypertensive factor or excessive intracellular calcium)

=> file wpids

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 22.49 FULL ESTIMATED COST 66.51 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -0.62 -0.62

FILE 'WPIDS' ENTERED AT 13:55:00 ON 09 JAN 2002 COPYRIGHT (C) 2002 DERWENT INFORMATION LTD

FILE LAST UPDATED: 05 JAN 2002 <20020105/UP>
MOST RECENT DERWENT UPDATE 200201 <200201/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

- >>> SDI'S MAY BE RUN ON EVERY UPDATE OR MONTHLY AS OF JUNE 2001. (EVERY UPDATE IS THE DEFAULT). FOR PRICING INFORMATION SEE HELP COST <<<
- >>> FOR UP-TO-DATE INFORMATION ABOUT THE DERWENT CHEMISTRY
 RESOURCE, PLEASE VISIT
 http://www.derwent.com/chemistryresource/index.html <<</pre>
- >>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://www.derwent.com/dwpi/updates/dwpicov/index.html <<<

=> s 12

431 SHARK

82 SHARKS

462 SHARK

(SHARK OR SHARKS)

2352 CARTILAGE

96 CARTILAGES

2399 CARTILAGE

(CARTILAGE OR CARTILAGES)

43 SHARK CARTILAGE

(SHARK(W)CARTILAGE)

133260 EXTRACT

31792 EXTRACTS

147828 EXTRACT

(EXTRACT OR EXTRACTS)

1075 EXT

93 EXTS

1128 EXT

(EXT OR EXTS)

148659 EXTRACT

(EXTRACT OR EXT)

11 (SHARK CARTILAGE) (2A) EXTRACT

151094 ANTI

9 ANTIS

```
151100 ANTI
                 (ANTI OR ANTIS)
         12555 HYPERTENS?
          789 ANTI (W) HYPERTENS?
          4052 ANTIHYPERTENSIVE
          1872 ANTIHYPERTENSIVES
          4783 ANTIHYPERTENSIVE
                 (ANTIHYPERTENSIVE OR ANTIHYPERTENSIVES)
         93838 CALCIUM
             4 CALCIUMS
         93840 CALCIUM
                 (CALCIUM OR CALCIUMS)
        168149 CA
          1267 CAS
        169233 CA
                 (CA OR CAS)
          3593 BLOCKER#
           521 (CALCIUM OR CA) (2W) BLOCKER#
           384 VERAPAMIL
             1 VERAPAMILS
           384 VERAPAMIL
                 (VERAPAMIL OR VERAPAMILS)
            51 NIFEDIPIN
             1 DILTIASEM
             1 ((SHARK CARTILAGE) (2A) EXTRACT) AND (ANTI(W) HYPERTENS? OR ANTIH
L6
               YPERTENSIVE OR ((CALCIUM OR CA) (2W) BLOCKER#) OR VERAPAMIL OR
              NIFEDIPIN OR DILTIASEM)
=> d
     ANSWER 1 OF 1 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
L6
     1999-120772 [10]
AN
                       WPIDS
DNC C1999-035371
     Shark cartilage extract - has
ΤI
     anti-parathyroid hypertensive factor activity.
DC
     CHIU, K W; PANG, P K T; SHAN, J J
IN
     (CVTE-N) CV TECHNOLOGIES INC
PA
ĊYC
    83
                  A1 19990121 (199910) * EN 29p
                                                    C07K001-00
PΙ
     WO 9902548
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SZ UG ZW
         W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE
            GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
            MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
            US UZ VN YU ZW
     AU 9883790
                A 19990208 (199924)
                                                     C07K001-00
                  A1 20000628 (200035) EN
     EP 1012163
                                                     C07K001-00
         R: AT CH DE FI FR GB LI
     CN 1263534
                 A 20000816 (200055)
                                                     C07K001-00
     JP 2001509513 W 20010724 (200147)
                                              32p
                                                     A61K035-32
     KR 2001021764 A 20010315 (200159)
                                                     C07K001-00
    WO 9902548 A1 WO 1998-US13591 19980709; AU 9883790 A AU 1998-83790
     19980709; EP 1012163 A1 EP 1998-934212 19980709, WO 1998-US13591 19980709;
     CN 1263534 A CN 1998-807088 19980709; JP 2001509513 W WO 1998-US13591
     19980709, JP 2000-502067 19980709; KR 2001021764 A KR 2000-700327 20000111
FDT AU 9883790 A Based on WO 9902548; EP 1012163 A1 Based on WO 9902548; JP
     2001509513 W Based on WO 9902548
PRAI US 1997-52233P
                      19970711
     ICM A61K035-32; C07K001-00
         A61K031-715; A61K038-00; A61P003-10; A61P009-00; A61P009-12;
          A61P043-00; C07K001-02
```